WUKKING PAPER

1 3 FEB 1981

NOTE FOR: William Donnelly
          DDO/IMS

FROM: 25X1
          Information Handling Systems Architect

Bill:

     1. Your people have been extremely helpful in the briefings
they have given me about the DDO's information handling system. The
briefings have been thorough and knowledgeable, and I greatly
appreciate the open spirit in which they were given.   25X1

     2. I have been left with some concerns about CRAFT, however,
which I want to pass along. Basically, I don't think your people
are as far along as they think they are. The CRAFT description
document which I have been given falls short of the sort of system
design specification I think is needed to base a major project
commitment upon. Hardware acquisition, in particular, should be
done on the basis of a much clearer definition of exactly what the
system has to support.   25X1

     3. To clarify what I have in mind, I have enclosed a list of
the sort of questions that such a specification should answer in the
case of CRAFT. You will see that missing from the list are things
like the acquisition strategy, top-level procurement plan, test
plan, and funding, etc--the items you have in appendices A and B of
the CRAFT Project Proposal--because I think these are best put in a
separate Project Management Plan. I think there are a number of
good reasons for keeping them as separate documents.   25X1

     4. I understand that the teams who visited Wang on 27 January
came away very enthusiastic about what they saw, so much so that
there seems to have been talk about designing around Wang   25X1
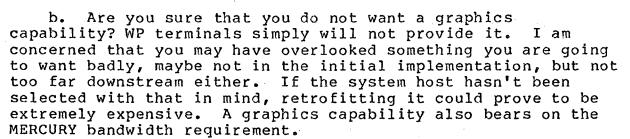   25X1
                              Personally, I think any such
suppositions are premature   25X1
                          As you can discern from the list, I think a lot of 25X1
work still needs to be done before such a decision can be made.
With respect to the Wang system, my concerns are focused on these
matters:

     a. I understand that Wang's WPS and OIS systems are
     implemented in BASIC. The introduction of BASIC as a HOL for
     large system development is a major concern. It is a great
     language for analysts but a poor one for use in systems
     implementation. In addition, it is inherently inefficient
     because it is interpreted rather than compiled. I would hate to
     see it get started in the Agency as a systems implementation
     language in this context.   25X1

SECRET

b.   Are you sure that you do not want a graphics capability? WP terminals simply will not provide it.   I am concerned that you may have overlooked something you are going to want badly, maybe not in the initial implementation, but not too far downstream either. If the system host hasn't been selected with that in mind, retrofitting it could prove to be extremely expensive. A graphics capability also bears on the MERCURY bandwidth requirement.

c.   I think the security requirements may need to be worked a bit more. Are standalone WPs acceptable? They may present security problems in terms of rapid, assured data destruction associated with floppies, that a hosted terminal system would not. Would security classification identifications appear on all screens?

25X1
25X1

5.   Since I understand that funds for CRAFT acquisition are programmed in FY-82, time appears to be short. A lot needs to be done to be ready to make the key decisions at that point. After you have had a chance to think about these comments, I would appreciate having your thoughts. Maybe the IHSA can help.

25X1

25X1

Attachment:
   Questions Relevant to a CRAFT
   System Design Specification

SECRET